

Direct-Blot™ HRP anti-GFAP Antibody

Catalog# / Size	644711 / 100 µL
Clone	2E1.E9
Regulatory Status	RUO
Other Names	Glial fibrillary acid protein
Isotype	Mouse IgG2b
Description	GFAP is expressed exclusively in astrocytes in the central nervous system. The protein is a member of the intermediate filament family of proteins which form networks providing support and strength to cells. This antibody does not cross-react with other intermediate filaments such as vimentin, neurofilament proteins, desmin and others. More than 50 GFAP mutations have been identified to be associated with the Alexander disease.

Product Details

Verified Reactivity	Human, Mouse, Rat
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Bovine spinal cord homogenate
Formulation	This antibody is provided in 50% glycerol in aqueous buffered solutions with preservatives.
Preparation	The antibody was purified by affinity chromatography and conjugated with HRP under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	Upon receipt, the antibody solution should be stored undiluted at -20°C, and protected from prolonged exposure to light.
Application	WB - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by Western blotting . For Western blotting, the suggested dilution is 1:2,500-1:25,000. The optimal dilution should be determined by titration for each individual assay of interest. 25 µl and 100 µl of Direct-Blot™ HRP antibody can be used for approximately 5 and 20 Western blots, respectively, at the recommended concentration/dilution.
Application References (PubMed link indicates BioLegend citation)	1. McLendon RE and Bigner DD. 1994. <i>Brain Pathol.</i> 4:221. 2. Liu W, <i>et al.</i> 2011. <i>Proteomics</i> 11:3556. (FC) PubMed
RRID	AB_2650857 (BioLegend Cat. No. 644711)

Antigen Details

Structure	Around 50 kD
Distribution	Only expressed in astrocytes in the central nervous system.
Function	Together with other proteins to form intermediate filaments which supports astroglial cells. Astroglial cells support and nourish cells in the brain and spinal cord. If brain cells are injured through trauma or disease, astroglial cells react by rapidly producing more GFAP protein.

Cell Type	Astrocytes
Biology Area	Cell Biology, Neuroscience, Neuroscience Cell Markers
Molecular Family	Intermediate Filaments
Gene ID	2670

Related Protocols

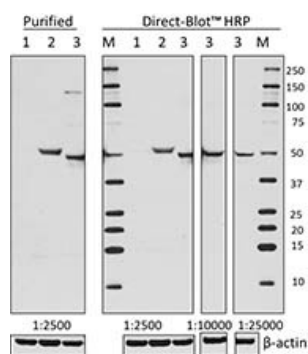
[Direct-Blot™ HRP Antibodies Save You Time - Video](#)

[Direct-Blot™ Western Blotting Protocol](#)

Other Formats

Purified anti-GFAP, Alexa Fluor® 488 anti-GFAP, Alexa Fluor® 647 anti-GFAP, Alexa Fluor® 594 anti-GFAP, Brilliant Violet 421™ anti-GFAP, Direct-Blot™ HRP anti-GFAP

Product Data



Total cell lysate from HeLa (lane 1, negative control), U87-MG (lane 2) and tissue lysate from mouse brain (lane 3) (15 µg/lane) were resolved by electrophoresis (4-12% Bis-Tris gel), transferred to nitrocellulose membrane, and probed with 1:2,500 purified anti-GFAP (clone 2E1.E9) antibody, or 1:2,500, 1:10,000 and 1:25,000 Direct-Blot™ HRP anti-GFAP (clone 2E1.E9) antibody. Purified proteins were visualized using an HRP goat anti-mouse IgG secondary antibody (clone Poly4053) and chemiluminescence detection. Direct-Blot™ HRP anti-β-actin (clone 2F1-1) antibody was used as a loading control. Lane M is the MW ladder.

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BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587